

**REMARKS**

Applicant would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe the subject matter which applicant regards as the invention.

The Examiner indicated that claim 122 contains allowable subject matter and would be allowable if rewritten in independent form. Applicant submits that the allowable status of claim 122 is unchanged by the present amendment and, therefore, claim 122 will not be discussed further hereinafter.

The Examiner allowed claims 63-99, 123, and 125. Applicant acknowledges the allowance of claims 63-99, 123, and 125.

The Examiner rejected claims 100-121 and 124 under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The Examiner stated that the method claims do not produce a tangible result in that it is unclear how the result is being stored, displayed or used in any tangible manner. Applicant notes that claim 100 has been amended to include the limitation "using the calculated spatial derivatives to derive geophysical data." Support for the added feature can be found on page 19, lines 28-30 of Applicant's international application (Int'l App. No. PCT/AU2003/000770). Applicant submits that amended claim 100 produces a tangible result and satisfies 35 U.S.C. 101. Applicant respectfully requests that the rejection of claim 100 under 35 U.S.C. 101 be withdrawn.

Claims 101-121 and 124 depend either directly or indirectly on claim 100, thus, all arguments pertaining claim 100 are equally applicable to these claims and

are herein incorporated by reference. Applicant, therefore, respectfully requests that the rejection of claims 101-121 and 124 under 35 U.S.C. 101 be withdrawn.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 18-0160, our Order No. GRF-15791.

Respectfully submitted,

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